

SAN FRANCISCO BAY AREA
ATTAINMENT-CONTINGENCY PLAN
FOR THE
NATIONAL CARBON MONOXIDE STANDARD

AUGUST 1993

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The appendix referenced herein is not included with this document. It is included in a separate document, "Attainment Plan Appendices," which can be obtained by calling the Bay Area Air Quality Management District, (415) 749-4900.

ABBREVIATIONS AND TERMINOLOGY

ABAG	Association of Bay Area Governments	I & M	Motor Vehicle Inspection and Maintenance (Program)
ARB	(California) Air Resources Board	MTC	Metropolitan Transportation Commission
BAAQMD	Bay Area Air Quality Management District	NAAQS	National Ambient Air Quality Standards
BAR	Bureau of Automotive Repair	NO _x	Oxides of nitrogen
CAA	(Federal) Clean Air Act	NPRM	Notice of Proposed Rule Making
CAAA	(Federal) Clean Air Act Ammendments	NSR	New Source Review
CEQA	California Environmental Quality Act	ppm	Parts per million
CO	Carbon monoxide	ROG	Reactive organic gases
DOT	Department of Transportation	RTP	Regional Transportation Plan
EPA	Environmental Protection Agency	SIP	State Implementation Plan
FHWA	Federal Highway Administration	TIP	Transportation Improvement Program
FTA	Federal Transit Administration		

SECTION 1: INTRODUCTION

This Carbon Monoxide Attainment-Contingency Plan (herein the Contingency Plan) addresses the ambient air quality standard for carbon monoxide set by the U.S. Environmental Protection Agency (EPA), under the provisions of the federal Clean Air Act of 1970 and subsequent amendments. The Contingency Plan documents a control measure that would be put in place in the San Francisco Bay Area if the existing carbon monoxide control strategy proves inadequate for the region to attain the national carbon monoxide standard by December 31, 1995.

Carbon monoxide is an odorless, invisible gas which affects the health of people exposed to high concentrations. Most of the Bay Area's carbon monoxide comes from motor vehicles. A substantial amount also comes from burning wood in fireplaces and woodstoves. State and federal controls on new

cars and gasoline, and voluntary efforts to reduce woodburning have been implemented to reduce carbon monoxide levels. However, during winter months the Bay Area has exceeded the national standard for carbon monoxide.

The Bay Area Air Quality Management District (BAAQMD or District) has measured carbon monoxide levels for many years. Because past carbon monoxide measurements showed violations of the national standard, the Bay Area was designated by EPA as a **moderate** carbon monoxide nonattainment area, and was subject to various planning and air pollution control requirements.

This Contingency Plan, required by the 1990 Clean Air Act Amendments, will be adopted by the three co-lead agencies¹ and submitted to the California Air Resources Board (ARB) for subsequent transmittal to EPA by November 15, 1993.

SECTION 2: CURRENT CARBON MONOXIDE AIR QUALITY IN THE BAY AREA

The National Ambient Air Quality Standard (NAAQS) for Carbon Monoxide

The national standard for carbon monoxide, the subject of this Plan, is 9.0 parts per million (ppm) of carbon monoxide in ambient air, based on an eight-hour averaging time for the measurement.

The Bay Area's Carbon Monoxide Classification for Federal Air Quality Planning

The Bay Area is classified as a *moderate* carbon monoxide nonattainment area, with a design value of 11.8 ppm. The design value is calculated from past air monitoring data, and represents the worst concentration that could be expected at a single monitor given favorable conditions for formation of carbon monoxide. Nonattainment areas with a moderate classification must prepare a Contingency Plan.

Recent Carbon Monoxide Monitoring Trends

In 1990, only one of the District's air quality monitors, San Jose--4th Street, exceeded the national carbon monoxide standard. It did so on two days. The maximum concentration recorded was 11.3 ppm.

In 1991, San Jose--4th Street continued to be the only air monitoring station recording a national carbon monoxide exceedance. It recorded an exceedance on four days, with a maximum value of 10.9 ppm.

In 1992, there were no stations in the District's network that recorded a national exceedance. Another air monitoring station in San Jose--the "Burbank" monitor--recorded a maximum value of 7.5 ppm. This highest value is almost 20 percent below the national standard.

¹ BAAQMD, the Metropolitan Transportation Commission, and the Association of Bay Area Governments

For redesignation to a carbon monoxide attainment area, one requirement is two years of "clean" air with no station recording more than two exceedances of the national standard. If the 1993/94 winter carbon monoxide "season" does not produce violations of the CO standard, then the co-lead

agencies can prepare a Redesignation Request and Maintenance Plan for carbon monoxide, similar to the one prepared this year for ozone. The 1990 Clean Air Act Amendments do not require the Bay Area to attain the federal carbon monoxide standard until December 31, 1995.

SECTION 3: 1990 CLEAN AIR ACT AMENDMENTS' CARBON MONOXIDE NONATTAINMENT AREA PLANNING REQUIREMENTS

Based on the Bay Area's design value of 11.8 ppm and previous steps California has taken to control air pollution, only a few requirements of the 1990 Clean Air Act Amendments (CAA) apply to the Bay Area:

- ***Submit a 1990 emissions inventory by November 15, 1992 and revise every three years thereafter until attainment.*** (The initial requirement for submittal of a Bay Area emissions inventory has been satisfied by ARB.)
- ***Submit a State Implementation Plan (SIP) revision requiring gasoline with no less than 2.7 percent oxygen content in the winter months.*** (ARB obtained a waiver for 1.8-2.2 percent oxygen content. In the Bay Area, sale of oxygenated fuel began November 1, 1992 and ended January 31, 1993. Sale will resume October 1, 1993 through January 31, 1994. The winter oxygenated fuels program will continue through 1996, at which time the

requirement will be incorporated into California Phase II Reformulated Fuels.)

- ***"Basic" Motor Vehicle Inspection and Maintenance (I & M) Program.*** (The current California "Smog Check" Program meets most federal basic I & M requirements. The State must adjust the current repair cost waiver limits to meet 1990 CAAA requirements.)
- ***Part D New Source Review Permit Requirements.*** (The District's existing NSR Program meets EPA's requirements.)
- ***Contingency Measures. These would be implemented in the event the Bay Area fails to attain the national carbon monoxide standard by December 31, 1995.*** (The Bay Area has selected an Enhanced Motor Vehicle Inspection and Maintenance (I & M) Program as its contingency measure. See Section 4 for additional information.)

SECTION 4: CONTINGENCY MEASURES

Section 172(c)(9) of the 1990 CAAA requires that an attainment plan include contingency provisions. These provisions would be implemented in the event that the Bay Area fails to: (1) make reasonable further progress² toward attaining the national primary air quality standard for carbon monoxide by December 31, 1995, or (2) actually attain the standard by December 31, 1995. The specific contingency measure identified to meet this requirement is an "enhanced" inspection and maintenance (I & M) program for motor vehicles.

Section 182(c)(3) of the 1990 CAAA requires an "enhanced" I & M program in areas classified as "serious" "severe" or "extreme" ozone nonattainment areas. "Moderate" ozone nonattainment areas are required to have a "basic" I & M program.

The Bay Area which is classified as "moderate" for ozone, would only be required to implement the "basic" I & M program, which is in place today. The basic I & M program includes an idle test and visual inspection for tampering and defects to the emission control systems. In addition, the basic I & M

2 "Reasonable further progress" is the annual incremental reduction in pollution necessary for the Bay Area to attain the national primary air quality standard for carbon monoxide by December 31, 1995.

program allows test and repairs to occur at the same location, with cost limits ranging from \$75 to \$300, depending on the model year.

Under EPA's guidelines, the enhanced I & M program would improve the testing of automobiles for emissions under loaded modes, during acceleration, and from evaporation. The program would separate State-contracted test stations from the repair stations and increase the repair cost limits to at least \$450.

In California, I & M programs are adopted by the State Legislature. The three regional agencies anticipate that the State Legislature will adopt a complying enhanced I & M program and that the Bay Area will elect to implement the program as needed to attain State air quality standards and/or as a contingency measure to maintain national standards. Table 1 shows the potential emission reductions from this measure as the difference between the enhanced program and the basic program.

TABLE 1
EMISSION REDUCTIONS FROM IMPLEMENTATION OF
AN ENHANCED I & M PROGRAM IN THE BAY AREA
(Tons/day)

Pollutant	Basic I & M	Enhanced I & M	Difference
ROG	28	52	24
CO	235	537	302
NOx	12	41	29

Source: California I/M Review Committee's *Fourth Report to the Legislature—Evaluation of the California Smog Check Program and Recommendations for Program Improvements*, February 16, 1993.

SECTION 5: CONFORMITY PROCESS

Section 176(c) of the 1990 CAAA outlines the "conformity" provisions of the Act. Federal actions are required to conform to the State Implementation Plan's (SIP's) purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standard and achieving expeditious attainment of these standards. Federal actions are differentiated into transportation-related actions by FHWA or FTA, and all other federal actions. The "transportation conformity" regulations govern the first set of actions, and the second set of actions will be addressed by the "general conformity" regulation to be issued later this year. This section provides a general overview of the transportation conformity requirements as conducted by MTC.

MTC will not approve any transportation plan, program, or project unless these activities conform to the purpose of the SIP. MTC's current conformity requirements include procedures from federal court orders relating to litigation over the 1982 Bay Area Air Quality Plan (the '82 SIP for the Bay Area) as well as procedures from the June 1991 Joint DOT/EPA "interim" guidance for transportation conformity.

Transportation plan refers to the MTC Regional Transportation Plan (RTP), which is the 20 year master plan for the region and which provides policies, actions, and financial projections to guide transportation investment decisions. Transportation program refers to the Transportation Improvement Program (TIP), which is a financially realistic set of highway and transit projects to be funded over the next seven years; the TIP includes all projects requiring federal funding, permits, or other approvals. A transportation project is any highway or transit project which is included in the RTP and TIP, requires federal funding or action, and is submitted to MTC for project review and fund application approval. Detailed conformity criteria and procedures are described in MTC Resolution No. 2270 and are included in Appendix D of the Attainment Plan, "Conformity Process."

On January 11, 1993, EPA published a Notice of Proposed Rule Making (NPRM) in the Federal Register which contained proposed final regulations for transportation conformity that will apply to both nonattainment and maintenance areas. The NPRM addresses two time periods: (1) the period up to the time when a revised SIP is approved by

EPA, and (2) the period following EPA SIP approval. Once these regulations are adopted, they will replace the "interim" regulations described above. However, until these regulations are adopted, the

current set of federal court-ordered conformity procedures and interim DOT/EPA procedures will govern the transportation conformity process for the Bay Area.

SECTION 6: ENVIRONMENTAL REVIEW / CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE

The Enhanced Motor Vehicle Inspection and Maintenance Program has not received environmental review. The I & M Program would be promulgated by the California Legislature and adopted and implemented by ARE or California Bureau of Auto-

tive Repair (BAR). The ARB or BAR would be required under CEQA to provide environmental review and documentation of the enhanced I & M program prior to adoption of the program.

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